

A photograph of a small stream flowing through a wooded area. The stream is lined with large, flat, light-colored stones. The water is dark and reflects the surrounding trees. The banks are covered in grass and fallen leaves. The background shows a dense forest of trees.

**Moving  
Forward**

The Brownfields Program has evolved significantly in the years since its inception and even more broadly since the passage of the Brownfields Law. Ever-expanding partnerships have shaped cleanup and redevelopment achievements at thousands of properties and in hundreds of communities across the United States. Billions of dollars have been leveraged for cleanup and redevelopment, and the very perception of brownfields has been forever altered.

Still, there remains room for growth and advancement. It is estimated that there may be a million brownfields scattered across the country, many of them in key locations: along waterfronts, near transportation hubs, in fully-developed suburbs, and even in rural communities. Many of these brownfields were once the heart of their community, and now present opportunities for revitalization.

The Brownfields Program established a foundation for success in the years ahead by putting best practices into law and policy, increasing the number and type of potential grantees, and expanding the circle of brownfields partners. As the Program moves forward on its mission of cleanup and reuse, it follows four guiding principles:

- Protecting the Environment
- Promoting Partnerships
- Strengthening the Marketplace
- Sustaining Reuse

Following this framework, the program is advancing on new challenges and opportunities.



Bates Mill Property  
Lewiston, ME



La Capilla Chapel  
Silver City, NM

## Protecting the Environment

The core mission of EPA and the Brownfields Program is the protection of human health and the environment. Assessing brownfields helps communities understand the risks these properties pose and provides the information needed to undertake cleanup and reuse. Cleaning up brownfields improves the environment by eliminating the risk of exposure to harmful contaminants and pollution of the surrounding ecosystem. In the future, the Brownfields Program will seek even more effective ways to protect health and the environment, such as increased use of the “Triad” approach, support for brownfields public health studies, and improved data gathering.

The Triad approach was developed to improve environmental decision-making through systematic planning, dynamic work strategies, and real-time measurement technologies. The approach also increases developer confidence that project decisions—regarding issues such as contaminant presence, location, exposure, and risk reduction options—are being made accurately and cost-effectively. The Triad approach was used by the Middlesex County Improvement Authority in Milltown, New Jersey. Using a multi-disciplinary team, intensive sampling was conducted at over 450 locations across a 22-acre property. This rapid sampling greatly accelerated the project. Redevelopment plans for the property include retail, office, and health care; a variety of residential units; and new recreational space for local residents.

Brownfields communities are assaulted by a wide range of land, water, and air pollution. The Brownfields Program funds public health studies to understand the human health impact of brownfields and the importance of cleanup. Communities can use their EPA Brownfields grant funds to conduct local health studies, integrating steps to reduce pollution with existing community revitalization efforts. The number of communities using funding this way is small, but will likely increase.

Finally, to protect health and the environment successfully, EPA needs to ensure that the best data possible is available to communities and those making brownfields decisions. To meet this need, the Brownfields Program has implemented a property profile form that provides for more standardized collection of information on brownfields. The form captures details about contaminants, cleanups, and subsequent

32 *“The Triad approach should be the recommended approach for assessment because developers must have a high-level of confidence that assessment and cleanup (if necessary) are completed on schedule and the information is valid and reliable.”*

Jim Mack  
NJIT

Regarding the use of Triad in  
environmental decision making

reuses—information that will aid those making decisions about brownfields at local, regional, and national levels.

## Promoting Partnerships

As discussed in this report, partnerships are the cornerstone of the Brownfields Program. In the cases already highlighted, EPA support catalyzed action and helped bring parties together to find solutions to their brownfields challenges. The Brownfields Program will continue to put considerable effort into enhancing current partnerships and establishing new ones. The public, non-profit, and private sectors all have important roles to play in the cleanup and reuse of brownfields. Many different specialties, backgrounds, and interests are needed to resolve the often complex issues accompanying these properties.

Future partnerships will involve many of the agencies, organizations, and communities already engaged in brownfields revitalization. There will be innovative partnerships created to deal with existing challenges and those still on the horizon. Local individuals and national entities will all play roles in identifying issues, resources, and solutions. For example, the Portfields and Mine-Scarred Lands initiatives brought federal, state, and local agencies together with non-profit and private sector organizations to form community-specific teams to address unique elements of the brownfields universe. There are many issues facing communities regarding specific contaminants, site-types, and reuses that will benefit from cooperative collaboration, and EPA is committed to supporting the partnerships meeting this essential need.

## Strengthening the Marketplace

The Brownfields Program has learned that an important element of success depends on the extent that public investments leverage private funds. The market forces that drive the economy demand certainty—financial, legal, and environmental. The Brownfields Program provides incentives and tools to ensure that there is a strong, functioning market for cleaning up and reusing contaminated properties. The Brownfields Program will foster innovative ways to improve the conditions and climate for revitalization. Examples include tax incentives, environmental insurance, and the use of GIS technologies.



Phalen Corridor  
St. Paul, MN

### Access to Information

The Brownfields Program works to provide the public with access to information on brownfields properties. The Program publishes key information on assessment and cleanup activities reported by grantees into EPA's "Envirofacts" database. Envirofacts is an online, searchable repository of statistics and other environmental information collected by EPA programs.

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Job Training Course  
San Juan, PR

*Moving Forward*



### Creating Sanctuary after Petroleum Cleanup

The Brownfields Law allowed grant funding to be used for petroleum cleanup. A 2003 cleanup grant for petroleum and hazardous substances facilitated the development of St. Paul, Minnesota's newest park, the Bruce Vento Nature Sanctuary, which opened to the public on May 21, 2005. Having completed cleanup of petroleum contaminated soil in December 2004 with the assistance of neighborhood groups, the Sanctuary now provides essential greenspace for city residents. A portion of the property was restored as a natural habitat, while another was redeveloped for recreational use. Prior to EPA's involvement, project partners raised more than \$3 million for acquisition of the property, which now has a reestablished floodplain forest and wetlands and provides a new home for migratory birds and other wildlife.

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The Brownfields Tax Incentive encourages brownfields redevelopment by allowing taxpayers to immediately reduce their federal taxable income by the cost of their eligible cleanup expenses. This incentive creates an immediate tax advantage from these expenses, helping to offset short-term cleanup costs. State brownfields tax credits have also proven invaluable to a private sector increasingly eager for brownfields investment opportunities. In New Jersey, owners of brownfields can apply for state tax rebates to cover as much as 100 percent of cleanup costs. Creative, new tax incentives are emerging at all levels of government to help level the economic playing field by making brownfields as appealing to developers as untouched greenfields.

Environmental insurance has evolved to match the changing brownfields market. It is increasingly relied on by sellers, buyers, developers, and even local governments involved in brownfields transactions. Policies are written to manage risks ranging from cost overruns to third-party liability claims that may arise during cleanup and redevelopment. In 1999, Massachusetts became the first state in the country to offer discounted policies and subsidies to public and private developers. In Emeryville, California, a former industrial property became the planned location for a 250-room hotel and a 350-unit residential/400,000-square-foot retail development. Given the property's history as a pesticide production facility, a \$10 million environmental insurance policy for the developer was essential to allowing this project to proceed.

Another must-have tool for brownfields stakeholders is GIS, which combines maps, data, and other interfaces (e.g., aerial photography) to locate, display, and manipulate information. In terms of brownfields, GIS is one of the primary tools to identify and maintain property inventories. This technology allows a state or smaller jurisdiction to market brownfields through a searchable database that can locate and display available properties and their characteristics.

## Sustaining Reuse

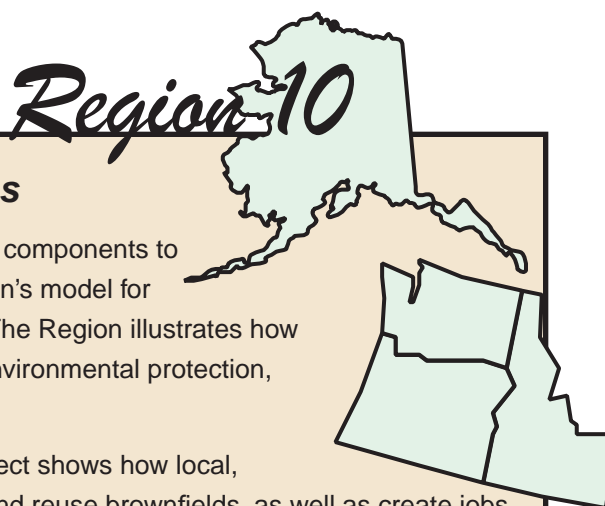
Sustainable reuse is the final pillar in EPA's brownfields strategy. In the brownfields lexicon, "sustaining reuse" means reusing a brownfield in a way that enhances a community's long-term quality of life. Sustainability allows communities to "close the loop" of land reuse, by cleaning up

and reusing sites in ways that maximize economic and environmental benefits. The Brownfields Program has always encouraged sustainable planning, construction, and property reuse.

By promoting green building design, sustainable land use planning, greenspace preservation, and habitat restoration, EPA works to assure that properties are only labeled as a brownfield once. In order to receive funding, applicants must demonstrate that their project will address the goal of sustainable reuse of a property by preventing brownfields creation and future contamination. Many grant recipients adopt



South Bayfront Property  
Emeryville, CA



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### ***Leveraging Resources and Partnerships***

Leveraging resources and developing partnerships are key components to the success of Region 10's brownfields projects. The Region's model for success showcases the best elements of EPA's Program. The Region illustrates how leveraging resources and forming partnerships achieves environmental protection, economic improvement, and community revitalization.

In Seattle, Washington, the Courtland at Rainier Court project shows how local, state, and federal partners can work together to clean up and reuse brownfields, as well as create jobs and revitalize distressed areas. With a multitude of partners—King County; the City of Seattle; Washington Department of Community, Trade, and Economic Development; Washington Department of Ecology; South



Rainier Court Property  
Seattle, WA

East Effective Development; Senior Housing Assistance Group; and EPA—the 208-unit Affordable Senior Housing Project is now located on the site of former warehouses and junkyards. Over \$1 million in Brownfields grants helped leverage the \$17 million project. Along with the redevelopment, is the creation of jobs, affordable housing, and commercial space in the economically distressed Rainier Valley area of Seattle.

Idaho is effectively leveraging resources by using state and tribal response program funds to assess approximately 500 acres in Custer County. The acres will create a Historic State Park at the Former Bayhorse Mining District, which is included in the Idaho Historic Society's register of historic places. The Idaho Department of Parks and Recreation is preserving and restoring historic features on five properties within the site to provide recreational and educational opportunities to the citizens of Idaho. By establishing Bayhorse as a state park, the Department of Parks and Recreation will provide a destination for this area's tourism base, providing economic benefits to the City of Challis and Custer County.

**Web site: [www.epa.gov/region10](http://www.epa.gov/region10)**



Senn's Dairy  
Portland, OR



Montana Tech of the  
University of Montana  
Hardin, MT



Mason Run  
Monroe, MI

sustainable reuses into their master plans for brownfields. In Clallam County, Washington, the Jamestown S'Klallam Tribe is using its EPA funding for the restoration of the Sequim Bay estuary. This projected restoration is a multi-agency, multi-partner effort involving 20 local, state, federal, and private entities including local landowners, all of whom are actively involved in planning. An essential element of this restoration project is the removal of creosote treated pilings from the inter-tidal area of the estuary, which will offer significant and long-term environmental benefits.

EPA has also focused on the institutional controls (ICs) needed to preserve and protect the environment, as sustainability requires that ICs are maintained. Intended to supplement cleanup and engineering controls for contaminants on a property, ICs are administrative actions, such as legal restrictions, that minimize the potential for human exposure to contamination by ensuring appropriate land use. Because of the necessity and growing use of ICs, the Brownfields Law set aside funding to help ensure that these safeguards are complied with and remain intact, regardless of any changes in property ownership or land use. Collaborative efforts among states, local governments, and federal agencies will play an important role in developing mechanisms for implementing, maintaining, tracking, and enforcing ICs. Performed successfully, these efforts will ensure that ICs provide ever-improving reassurances to the private sector as properties change hands.

EPA is committed to listening to all stakeholders in brownfields revitalization, and watching for changing needs in public funding and policy support. The Brownfields Program, and its support to state and tribal environmental response programs, will continue to play a critical role in facilitating brownfields cleanup and reuse. Given its primary mission of protecting human health and the environment, EPA strives to ensure that brownfields cleanups are not just conducted to meet the minimum safe standard to permit their reuse, but are protective and beneficial in the long term. Addressing brownfields includes prevention as well as cleanup and redevelopment. The future of brownfields is about recognizing and avoiding the reasons they came to exist, and ensuring sustainable reuses for those who will enjoy the benefits of these restored sites for generations to come.